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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,729	01/05/2004	Raymond Carrasco	T-4323	1378
42556	7590	12/29/2005		
CHARLES H. THOMAS CISLO & THOMAS LLP 4201 LONG BEACH BLVD SUITE 405 LONG BEACH, CA 90807-2022			EXAMINER CHEUNG, DAVID	
			ART UNIT	PAPER NUMBER
			3713	
DATE MAILED: 12/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/750,729	Applicant(s) CARRASCO ET AL.	
	Examiner David Cheung	Art Unit 3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/5/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/5/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (US 4,678,093) in view of Lam (US 6,394,903 B1).

For claim 1, Allen discloses a musical infant nursing bottle employing a liquid container (Fig. 1, #14), an electrical power source, and a musical player, an omnidirectional, gravity-operated switching mechanism (Allen, fig. 4, #48, #50) with two, or alternatively, three mercury switches (Allen, figs. 2 and 3). Said switches, when actuated, create an open circuit condition between said electrical power source and said music player (Allen, col. 3, lines 34-59). Allen also discloses using toggle switch or button switch, alternatively, for a non motion-activated switching mechanism (Allen, col. 1, line 62 – col. 2, line 14), but is silent on utilizing a roller-operated gravity switch. Lam discloses a toy dice that employs a roller-operated, six-region, position sensor (Lam, col. 1 lines 50-52). For each region of Lam's sensor, it includes an inclined surface with a detent recess therein (Lam, fig. 6), an electrical switch having a micro switch actuator (Lam, col. 1, lines 64-65) located at said detent, and a ball movable by gravity to roll

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across said inclined surface (Lam, col. 1, lines 52-54), and releaseably engageable in said detent recess whereby said ball operates said switch actuator when lodged in said detent recess (Lam, col. 2, lines 45-47). As it is well known in the art that gravity actuated switch can be fluid-operated, roller-operated or even spring-operated, it would have been obvious to one of ordinary skill in the art at the time of invention to replace Allen's mercury operated gravity switch with one region of Lam's sensor, for detecting the tilting of the baby bottle, thus eliminating the possibility of mercury poisoning to the infant, baby, or the parent associated with mercury switches.

For claim 2, by employing Lam's switching mechanism into Allen's musical bottle, the inclined surface is a floor of a cavity (Lam, col. 1 line 41) formed beneath the liquid container, and the ball or sphere rolls freely across said floor and beneath said liquid container when said liquid container is tilted from vertical alignment.

For claim 3, as discussed above, said floor is inclined at an angle toward said detent recess of no less than about two degree (Lam, fig. 6).

For claim 7, said music player is comprised of an electronically encoded, programmed, digital chip (Allen, fig. 2, #42) with a speaker (Allen, fig. 2, #44) coupled thereto.

For claim 8, as discussed above, Allen teaches utilizing an externally accessible toggle switch and circuit (Allen, fig. 6, #114) for manually operated said digital chip instead of the gravity switches (Allen, col. 4, lines 62-63), but is silent on using both types of switches, with the manual switch and circuit as the bypass. However, it would have been obvious to one of ordinary skill in the art at the time of invention to

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incorporate the manual switch and circuit as the bypass circuit around the gravity switching mechanism of said music player for providing the user with an extra option of turning said music player on even when not nursing or turning said music player off when baby is asleep regardless of the position of the baby bottle.

Claims 4-6, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (US 4,678,093) in view of Lam (US 6,394,903 B1).

For claim 4, Allen's musical bottle with Lam's switch has a cavity floor that has a circular outer perimeter and an axial center and said floor slopes from said outer perimeter away from said liquid container and toward said axial center, and said detent recess is a circular aperture of diameter sufficiently larger than that of said sphere located in said floor at said axial center of said cavity. Lam's detent recess's diameter is larger than the diameter of the sphere. Applicant has not disclosed that having a detent recess smaller than the diameter of the sphere is for any particular purpose. Moreover, it appears that the aperture diameter of Lam, or applicant's invention, would perform equally well as the detent recess for the sphere.

Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to have modified Lam aperture diameter to be smaller than the sphere diameter because such a modification would have been considered a mere design consideration which fails to patentably distinguish over Lam.

For claim 5, Allen's bottle with Lam's switch has a cavity floor with an upper surface of inverted frustoconical shape.

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For claim 6, Allen's bottle with Lam's switch has a depressible button located directly beneath said circular aperture at said axial center of said floor.

For claim 9, as cited above, Allen's bottle with Lam's switch comprises a base encapsulating said electrical power source, said music player and said omnidirectional gravity-operated switching mechanism, and said base is detachably coupled to said liquid container, and said base defines within its structure a cavity having a ceiling located beneath said liquid container, and wherein said inclined surface is a floor of said cavity spaced beneath said ceiling a distance greater than the diameter of said sphere, and said floor has an inverted frustoconical shape and said detent recess is a circular aperture at the center of said floor and said circular aperture has a diameter smaller than the diameter of said sphere.

For claim 10, see claim 6 above.

Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (US 4,678,093) in view of Lam (US 6,394,903 B1) and further in view of Hadaway (US 5,664,745).

For claim 11, Allen's musical bottle, along with Lam's switching mechanism, as discussed above, comprising: a tubular liquid container having an open end with a baby feeding nipple therein and an opposite open end, a base having an axial center and forming a liquid container seat to receive and support said closed end of said liquid container from beneath and also serve as a stand for supporting said liquid container in an upright vertical orientation, and said base defines a cavity with a periphery

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therewithin and said cavity has a floor sloping from said periphery away from said liquid container and toward said axial center of said base, a detent recess defined in said floor at said axial center of said base, a rigid sphere located within said cavity and atop said floor for rolling movement thereacross, whereby said sphere lodges in said detent recess in said floor when said stand supports said tubular liquid container in an upright vertical disposition, a dynamic, electrical switch having a depressible switch actuator located directly beneath said detent recess, whereby when said sphere is lodged in said detent recess the weight of said sphere is sufficient to depress said depressible switch actuator, an electrical power source located in said base, and a music player located in said base and electrically connected to said electrical power source through said dynamic, electrical switch such that depression of said depressible switch actuator created an open circuit condition between said electrical power source and said music player. However, Allen's bottle is open for both ends. Hadaway discloses a stand-alone musical adaptor for baby nursing bottles that attaches to the close end of a baby bottle (Hadaway, fig. 1, #10). It would have been obvious to one of ordinary skill in the art at the time of invention to close the bottom end of Allen's liquid bottle and to render the musical player as an individual attachment for interchangeability between different liquid bottles and to provide the user with an option of using said bottle with or without the music player attached, and in additional, the option to use the music player as a stand-alone for playing music to the infant while not nursing.

For claims 12 and 16, see claim 7 above.

For claims 13 and 17, see claim 8 above

For claim 14, see claim 9 above.

For claim 15, as discussed above, Allen's musical bottle, along with Lam and Hadaway's teachings, comprising: an upright elongated tubular container for holding liquid to feed an infant and having a closed bottom end and an open top end, a baby feeding nipple secured to said open top end of said tubular container, a base containing an electrical battery and a music player therewithin, and having an axial center and a periphery wherein said base is formed with an upwardly facing seat at said periphery thereof to releasably receive said bottom end of said tubular container, and said base defines an enclosed cavity therewithin with a ceiling and a floor spaced from and recessed beneath said ceiling, and said floor slopes from said periphery away from said bottom end of said tubular container to said axial center of said base, and said floor defines a detent recess at said axial center of said base, a rigid sphere located within said cavity atop said floor and beneath said ceiling, a depressible, dynamic switch electrically connected to said battery and said music player and located beneath said floor and having a pressure operated switch actuator located directly beneath said detent recess, whereby gravitational force acts upon said sphere to cause it to roll to said axial center of said base, lodge in said detent recess and depress said dynamic switch actuator when said tubular container is upright and said longitudinal axis of said base is vertically aligned, and when said longitudinal axis of said base is tilted sufficiently from vertical alignment said sphere rolls out of said detent recess, thus closing said pressure operated switch actuator.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 4,415,776 - gravity switch for a telephone on-hold music device

US 4,817,950 - tilting sensor for a video game controller

US 5,672,090 - equine-shaped toy figure

US 6,392,556 B2 - safety chair tilt alarm

CH 690,165 A5 - weight actuated music module

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Cheung whose telephone number is 571-272-2772. The examiner can normally be reached on Monday - Friday, 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



XUAN M. THAI
SUPERVISORY PATENT EXAMINER

TC3700